



Public Comment
Utah Division of Air Quality
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October 31, 2013

Comments sent via email to mberger@utah.gov

To Whom It May Concern:

Before we move into the substance of our comments, allow us one caveat: We at HEAL are fully aware that we are entering a lengthy, complex process at its eleventh hour. While we believe that we have learned enough of the intricacies of air quality policy to offer an informed critique, we are also certain we may make errors. We appreciate your understanding that.

We also wanted to begin by thanking the Division of Air Quality for their hard work on the SIP, and generally on air quality matters. No one can attend Air Quality Board meetings without being impressed by the staff's knowledge and dedication.

However, with that said, we ultimately conclude that the SIP falls short of what it could and must be. Allow us to elaborate:

- 1) We aren't convinced these cuts will suffice. Up until quite recently, Division staff warned repeatedly in public forums that they weren't sure the pollution reductions they could count upon by 2019 would allow them to reach the needed targets. In just one example, see the Salt Lake Tribune coverage¹ of the May 2013 Air Quality Board which notes:

New data revealed Wednesday showed that, in order to reach the EPA's 2019 target level of 52 tons of pollution on a typical winter day, Utah County will have to cut another 10 tons of emissions. And the Salt Lake County area, which also includes parts of Box Elder, Tooele, Davis and Weber counties, will have to find a way to eliminate another 22 tons of pollution to reach a 227-ton target.

¹ <http://www.sltrib.com/sltrib/politics/56248867-90/font-utah-pollution-county.html.csp>

That was a big gap – less than six months ago. How did the Division overcome that? Mostly, we understand, because of a fortuitous shift of the baseline years, which moved the proverbial goalposts in a favorable direction. That change allowed the model to predict compliance – but it's safe to say it's not at all clear that reality in coming years will match that estimate.

It seems fair to say there is a strong chance that the “true baseline” is dirtier than the one that the model built into the SIP now relies upon. For example, if a winter inversion season like we just experienced were included as a baseline year, we are confident that the plan would not model attainment by 2019. And Utah will find itself scrambling, sooner rather than later, to identify additional cuts.

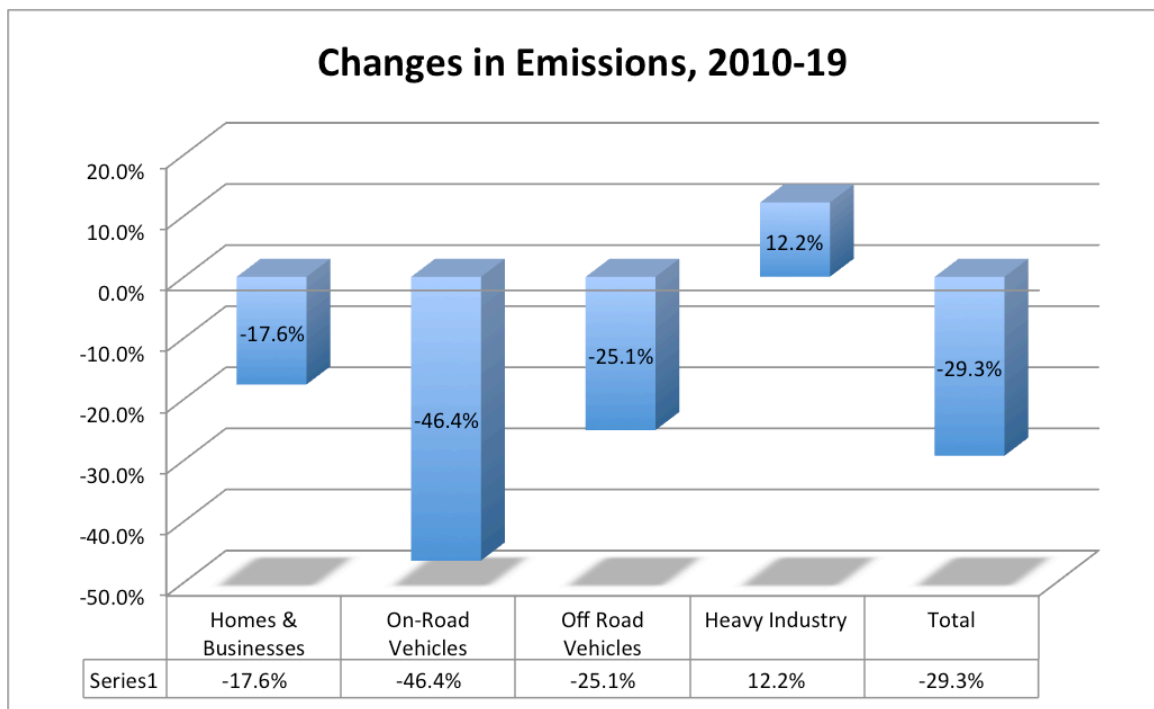
Thus, we would argue, the prudent path forward is to identify and institute even deeper cuts in emissions, in a bid to be confident that northern Utah's air will reach attainment, both to protect our health and to ensure that federal highway and transit funds aren't jeopardized.

In addition, we would argue, it benefits everyone – businesses, consumers, homeowners and industry – if emissions cuts are instituted earlier rather than later. Costs can be spread over more years and those required to make such investments – and the consumers who ultimately pay for them – will face reduced sticker shock.

- 2) The SIP has inherent boundaries – or perhaps, better said, living in a representative democracy with overlapping and limited levels of government restricts what the Division can do. It may be possible to significantly reduce emissions by mandating more efficient vehicles or dramatically boosting transit funding or discouraging exurban development or requiring hyper-efficient building codes, but such actions fall outside the realistic purview of the Division of Air Quality. (One might hope these were the priorities of the Governor and legislative leaders, but that's the topic for another document.)

Thus, the Division faces a limited menu of options when facing the need to come up with emissions cuts. One advantage of being somewhat new to this world is that it makes it easier to take a big step back, take a broad look at the SIP and the data that underlies it, and draw some big picture conclusions about that menu – and to further torture the metaphor, figure out which appear to be the favored entrées.

Doing so leave us with an inescapable conclusion: The SIP is allowing Utah's big industry to significantly increase its emissions, while focusing the bulk of its cuts elsewhere. Let's start with the below chart:

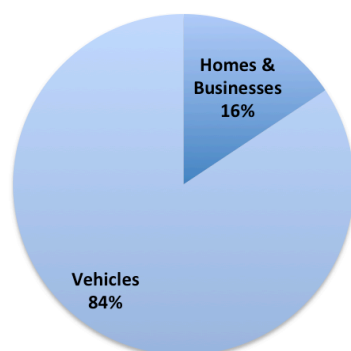


A few quick notes. We created this graph for general public, so have translated “area sources” to building & businesses and “point sources” to heavy industry. Second, the data that make up the chart is drawn directly from the SIP itself (Totals of direct PM_{2.5}, NO_x, VOCs, NH₃ and SO₂ emissions drawn from Table 4.2 of Utah SIP, Section IX, Part A. 21.)

The graph tells a clear story: the transportation sectors will produce significantly fewer emissions at the end of this decade, thanks in large part, of course, to federal Tier 2 gasoline and car standards, plus low-sulfur diesel rules for on- and off-road vehicles. Area sources are also dropping significantly, in large part due to Division action focusing on limiting emissions from a wide range of sources.

Since vehicles are a significantly bigger source than area sources, the improvements from that sector will do a significant majority of the work in pushing northern Utah closer towards PM_{2.5} attainment, as the below graph shows:

Emissions Cuts by Sector, 2010-19



(Data again is drawn from Table 4.2 of Utah SIP, Section IX, Part A. 21.)

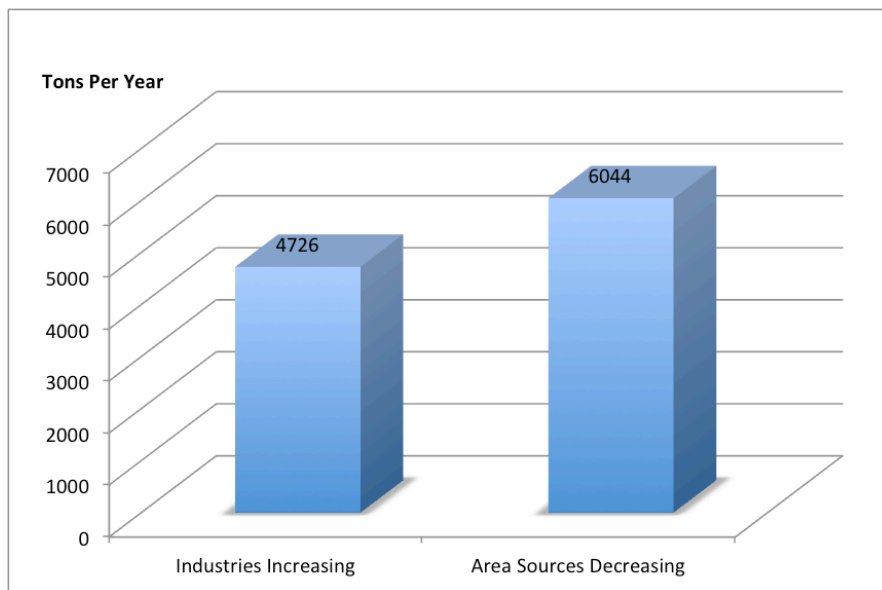
But industry, at the same time, will emit 12 percent more key pollutants. Point sources emitted approximately 15,253 tons of pollutants in 2010. In 2019, that figure, according to the SIP, will rise to 17,108 tons. That 12 increase in emissions is 1,854 tons more pollutants entering the northern Utah air shed during the very decade when we're struggling to meet federal standards.

It's important to acknowledge that point sources are a significantly smaller overall contributor to the Wasatch Front's air pollution than are other sectors, particularly transportation. However, despite that, the growth in the industrial sector is large enough that it significantly eats into the pollution control reductions that the Division has worked so hard to identify and implement.

According to the SIP data, the increases in emissions from 2010-19 come from 15 separate facilities.² Cumulatively, those industries will emit 4,726 additional tons of pollutants in 2019. (The number is greater than the net increase for the entire point source sector, since there are of course certain industries that are either closing down or limiting their emissions from 2010-19.)

Let's compare those increases in point sources to the reductions in area sources:

² Those are, in order of great increases in emissions: Kennecott Mine Concentrator, Kennecott Smelter & Refinery, Proctor & Gamble Paper Products, Nucor Steel, Hexcel Corporation, Kennecott NC-UPP-Lab-Tailings, Bountiful City Power, Wasatch Integrated IE, Hill Air Force Base Main, Vulcraft, Great Salt Lake Minerals- Production Plant, Geneva Rock Point of Mountain, ATK Thiokol Promontory, Chemical Lime Company and Olympia Sales Co.



The Division is rightfully proud of the measures they have taken to reduce area sources emissions – slashing emissions from “commercial bakeries, chain driven char broilers, printing and publishing, painting and degreasing, and the use and sale of wood stoves and wood boilers,” among other sources, according to public materials.

However, 78 percent of the gains earned via all of that hard work in the area sources category is wiped out by the added emissions that will be generated by growth from just 15 point sources.

This analysis leave us with one strong conclusion: The easiest way to improve the SIP and ensure that Utahns breathe cleaner air and that northern Utah reaches attainment is to require deeper cuts from point sources, the one sector which is significantly increasing its pollution during this key decade.

- 3) We now turn to seeking to identify specific pollution controls and mechanisms that can and should be required of point sources by 2019.

Our efforts in this area were greatly hindered by the tight timelines to comment on the SIP and supporting documents. The key data and analysis is contained in a series of technical support documents that were released in the very end of September. Those total thousands of pages. And, efforts from HEAL and others to request an extension of the public comment deadline beyond 30 days were rejected.

We plan on offering considerably more detail and specifics when we offer comments by Dec. 2 on R307-110-17. Section IX, Control Measures for Area and

Point Sources, Part H, Emission Limits. For now, however, we have some initial recommendations that will certainly seek to elaborate upon in our Part H comments.

First of all, we note that the Division often uses BACT (Best Available Control Technologies) and RACT (Reasonably Available Control Technologies) together and interchangeably, even though of course they are distinct standards and each requires its own process to determine the appropriate technology to choose.

Our initial perusing of the state's documents leaves us unconvinced that the Division has in all cases accurately determined if a point source is in fact using (or will be using) RACT. We'll specify a few such instances below (and much more so in our Part H comments.) But we are certain that all of Utah's point sources have not gone through a rigorous BACT process. In some cases, it is true that industry are currently using or are slated to use technologies that would later be determined to be BACT, or have previously determined to be so because of their involvement in an NOI process, but the BACT standard has certainly not been broadly applied.

With that said, we do believe that Utah will be soon ordered to do BACT – which is all the more reason that any technologies that are “close” to RACT should be ordered and implemented as soon as possible. As we understand it, because of a January 4, 2013 Circuit Court decision, if the Salt Lake nonattainment area does not show attainment by 2014, subpart 4 of the Clean Air Act applies and the area will be bumped up to serious nonattainment. In this case BACT would be the standard that major stationary sources must meet to achieve attainment.

Let us turn to some specific recommendations:

- a) While the refineries have taken some steps in the right direction to control emissions, and the sector as a whole will see reduced emissions by 2019, we do believe that additional control technologies should be ordered. Again, we will delve into more detail on this front in our Part H comments, but we believe generally Utah should establish additional controls at the FCCUs to reduce NOX, PM, SO₂ and VOC, as well as ordering BACT levels of control at heaters, boilers, cooling towers, flares, compressor engines, SRUs, cogeneration units and for equipment leaks.

Even with the refineries reducing their overall emissions by 2019, they will at that date continue to emit 4,672 tons a year. The only Utah facilities that pollute more are the Kennecott Mine Concentrator, Kennecott Smelter & Refinery and Nucor Steel. It's not unreasonable to ask refineries in an urban area to put in place all available control technologies – especially since these are likely to be required in the next couple years regardless.

Let us provide a couple brief examples:

- i) The consultant hired by the DAQ to evaluate RACT noted that Big West refinery should consider Selective Catalytic Reduction (SCR) for its Fluidized-Bed Catalytic Cracking Unit (FCCU). Doing so, the Techlaw document³ notes (on p. 29), could reduce NOx emissions by about 40 tons per year, at a cost of about \$20,000 per ton, which is a significant reduction at a cost in line with other RACT recommendations the Division has ordered. We also believe, although we didn't have sufficient time to look at all the refinery RACT documents to verify this, that SCR could be required at the other three refineries as well.
- ii) Techlaw also suggested that Chevron could limit its NOx emission from three of its boilers, thereby cutting emissions by 110 tons per year, at a cost of \$11,000 per ton. (See p. 21 of the same document referenced above.) Again, both a significant and affordable emissions cut, and, again, one we believe could be more broadly ordered

With more time, we certainly would delve into additional detail on control technologies not just for the refineries, but also for Kennecott and northern Utah's other significant point sources. We plan to focus on additional pollution control technologies and measures in our part H comments, as noted above.

- 4) We would like to briefly reiterate our concern about the short timeline to comment on the SIP – and the DAQ's decision to reject efforts to extend that. The technical documents that support the SIP cumulatively total thousands of pages, and require intricate cross-referencing to move back and forth between the analysis and data offered by the point sources themselves, the discussions produced by contractors such as Techlaw, and the ultimate conclusions and actions recommended by the DAQ. 30 days simply wasn't nearly enough time to do that well.

We remain somewhat confused by the deadlines which DAQ staff has told us they find themselves under. There is a big push to get the SIP passed and sent on to the U.S. EPA by the end of 2013, we have been told. And given the time needed to process and respond to comments, before the Air Quality Board votes, comment simply couldn't come in any later.

However, EPA staff itself has informally told us that no such end-of-2013 deadline exists, and that the agency itself has requested additional time. That's why we don't quite understand the rush, and wish the Division could have offered the public at least one more month to examine the SIP and all the hard work that underlies it.

³ <http://www.airquality.utah.gov/Public-Interest/Current-Issues/pm2.5/SIP-TSD/wasatchfronttsd/docs/chapter5/5c/a-Refinery%20General%20TSD%2010-1-13.pdf>

We appreciate your attention to these comments – and to the hundreds that have poured in to the Division from Utahns broadly raising similar issues. We are hopeful the SIP can be bolstered, and northern Utah’s air made cleaner for the benefit of our families, businesses, communities and economy.

Sincerely,

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